National Institute of Biomedical Imaging and Bioengineering National Institute of Diabetes and Digestive and Kidney Diseases Juvenile Diabetes Research Foundation International Present a Workshop

Imaging the Pancreatic Beta Cell

April 21-22, 2003 Bethesda Marriott Hotel, Bethesda, MD **Draft Agenda**

Monday, April 21, 2003 6:30-10:00 pm

6:30 Registration/Posters, Refreshments

7:00 Welcome

Dr. Robert Nerem, Special Scientific Advisor, NIBIB Dr. Griffin Rodgers, Deputy Director, NIDDK Workshop Chair(s)

7:20 Introduction and Background—Why do we need Beta Cell Imaging? Maren Laughlin (NIDDK), Brenda Korte (NIBIB)

7:30 Keynote Talk:

Diabetes and the Beta Cell: Overview and Current Directions Dr. Kenneth Polonsky

8:10 Keynote Talk:

In Vivo Molecular Imaging: Overview and Current Directions Dr. Brian D. Ross

8:50 Keynote Talk:

Autoimmune Destruction and Islet Transplantation: Progress and Goals for a Cure TBA

9:20 Posters, Refreshments

10:00 adjourn

Tuesday, April 22, 2003 8:00am – 6:30pm

7:00 Breakfast/Registration

8:00 Beta Cell Biology Plenary Talks:

- 8:00 Islet/Pancreas Anatomy and Physiology—Dr. Susan Bonner-Weir
- 8:30 Metabolism and Molecular Biology of the Beta Cell
 - —Dr. Christopher Newgard
- 9:00 An Informatics Approach to New Beta Cell Surface Markers
 - -Klaus Kaestner
- 9:15 Antibodies to Beta Cell Surface Markers –Ole Madsen

9:30 Break

10:00 Research Talks

10:00 Dr. Anna Moore

10:15 Dr. Guy Rutter

10:30 Dr. Britton Chance

10:45 Dr. Abass Alavi

11:00 Dr. Massimo Trucco

11:15 Dr. Per-Olaf Berggren

11:30-12:45 Working Lunch and Posters

Cellular Imaging of the Beta Cell –David Piston

12:45-2:15 Research Talks

12:45 Dr. Dixon Kaufman

1:00 Dr. Wen-Hong Li

1:15 Dr. Paul Harris

1:30 Dr. Alvin Powers

1:45 Dr. Dean Sherry

2:00 Dr. Brian Roman

2:15 Break

2:45 – 5:00 Imaging Plenary Talks:

- 2:45 Insights into Immune Destruction; Strengths and Weaknesses of Optical Imaging of the Beta Cell—TBA
- 3:10 Molecular and Physiological Imaging using MR—Dr. Chien Ho
- 3:35 Design of Molecular Imaging Agents:--Dr. Sam Achilefu
- 4:00 Novel Imaging Agents: function -- TBA

4:25 Break

4:40 Discussion

Translational Challenges for Cellular & Molecular Imaging --Dr. Joseph Frank "Challenges for the next five years—what problems do we need to solve to take beta cell imaging into the clinic?"

6:00 Adjourn